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EXAMINER	
TSO, EDWARD H	

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2838	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/740,740	BAKER, HOWARD S.	
	Examiner	Art Unit	
	Edward Tso	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-15,18-23,26,27,29-36,39,43 and 46-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-15,18-23,26,27,29-36,39,43 and 46-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-15, 18-23, 26, 27, 29-36, 39, 43 and 46-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pittman et al. in view of Uribe et al. and further in view of lino et al. (US 6,313,637).

Regarding claim 1, Pittman discloses a cell maintenance device, comprising: a switch (Figure 1, elment Q3); and a pulse generator capable of pulsing a cathode of at least one cell through the switch when the switch is closed (Column 11, lines 29-31). Pittman does not expressly disclose this method being used on a fuel cell. Uribe teaches a method for improving fuel cell performance by pulsing the cathode of a fuel cell (Column 2, lines 39-46). It would have been obvious to a person having ordinary skill in the art at the time of this invention to use the system of Pittman with fuel cells, as Uribe teaches it would improve the performance of the fuel cells. Moreover, Pittman in view of Uribe discloses the switch comprises: a relay capable of shorting the cell of a fuel cell stack ((figure 1, element Q3). Neither Pittman nor Uribe teach of using a dielectrically isolated driver, lino teaches of using dielectrically isolated drivers to control the operation of a battery stack (Figure 1, element 20a). It would have been obvious to

a person having ordinary skill in the art at the time of this invention to combine the teachings of lino, and use dielectrically isolated driver in order to isolate part of the circuitry.

Regarding claim 3, Pittman further discloses the maintenance device of claim 2, wherein the relay comprises a solid-state relay (Column 11, lines 31-32).

Regarding claim 4, Pittman, Uribe and lino disclose the fuel cell maintenance device of claim 1, wherein the relay is further capable of shorting a second cell of the fuel cell stack (Pittman's maintenance device in conjunction with the battery stack of lino).

Regarding claim 5, Pittman in view of Uribe disclose the fuel cell maintenance device of claim 1. Neither Pittman nor Uribe expressly teach of the system being used in a multicell system, lino teaches of a detecting and controlling system for a multi cell stack. It would have been obvious to a person having ordinary skill in the art at the time of this invention to duplicate the parts of Pittman and use the system for maintenance with lino's stack of cell. Which then yields a second switch through which the pulse generator is capable of pulsing a cathode of a second cell when the second switch is closed (Pittman Column 11, lines 29-31); and a control circuit capable of controlling to which of the first and second relays the pulse generator output is transmitted (lino Figure 1, element 1).

Regarding claim 6, Pittman, Uribe, and lino disclose the fuel cell maintenance device of claim 5, wherein the second switch includes: a second relay capable of shorting at least a second cell of a fuel cell stack (Pittman Figure 1, element Q3) ; and a

second dielectrically isolated driver capable of driving a second relay responsive to the pulse generator output (Iino Figure 1, element 20b).

Regarding claim 7, Pittman, Uribe, and Iino disclose the fuel cell maintenance device of claim 6, wherein at least one of the first relay and the second relay is further capable of shorting one of a third cell and a fourth cell of the fuel cell stack (Pittman Column 3, lines 23-25) (The relay of Pittman with his multi cell battery can be shorting a third and fourth cell).

Regarding claim 8, Pittman discloses the fuel cell maintenance device of claim 1, wherein at least one of the switch and the pulse generator is capable of receiving power returned from the fuel cell stack (Column 11, lines 29-31).

Regarding claim 9, Pittman in view of Uribe teach the fuel cell maintenance device of claim 8 and further comprising a voltage regulator coupled to at least one of the switch and the pulse generator (Figure 1, element 24, Q3, 17). Neither Pittman nor Uribe expressly disclose wherein the system is configured to receive the power returned from the fuel cell stack, Iino teaches that the battery stack is used to supply some power to the battery monitoring (figure 1). It would have been obvious to a person having ordinary skill in the art at the time of this invention to use the power that is being released by the battery during the pulsing for the system, and not let it just be wasted.

Regarding claim 10, Pittman in view of Uribe disclose the fuel cell maintenance device of claim 1. Neither Pittman nor Uribe expressly teach of the system being used in a multi cell system, Iino teaches of a detecting and controlling system for a multi cell stack. It would have been obvious to a person having ordinary skill in the art at the time

of this invention to duplicate the parts of Pittman and use the system for maintenance with lino's stack of cell. Which would then yield the pulse generator (Pittman figure 1, element 17) is capable of pulsing a cathode of a second cell when the switch is closed (The second cell would come for the stack of cells as shown by lino).

Regarding claim 11, Pittman discloses a cell maintenance device, comprising: at least one relay capable of shorting at least one cell (Column 11, lines 29-31); and a pulse generator (element 17) capable of pulsing a cathode of the cell through the relay. Pittman does not expressly disclose the system using fuel cells, or having a dielectrically isolated driver, lino teaches of using a dielectrically isolated driver (figure 1, element 20a) for the benefit of electrically separating components, and still being able to read and control there functions. Uribe teaches a method for improving fuel cell performance by pulsing the cathode of a fuel cell (Column 2, lines 39-46). It would have been obvious to a person having ordinary skill in the art at the time of this invention to use the system of Pittman with fuel cells, as Uribe teaches it would improve the performance of the fuel cells. Further, Pittman, Uribe, and lino teach the fuel cell maintenance wherein at least one of the relay (Pittman Figure 1, element Q3), the dielectrically isolated driver (lino Figure 1, element Q3) and the pulse generator (Pittman Figure 1, element 17). Neither Pittman, Uribe, nor lino expressly teaches where the above elements receive power returned from the fuel cell stack. lino does teach that the battery stack is used to supply some power to the battery monitoring (figure 1). It would have been obvious to a person having ordinary skill in the art at the time of this invention to use the power that is being released by the battery during the pulsing for

the system, and not let it just be wasted. Pittman further discloses the fuel cell maintenance further comprising a voltage regulator (Figure 1, element 24) through which at least one of the relay, the dielectrically isolated driver and the pulse generator is capable ofreceiving power returned from the fuel cell stack

Regarding claim 12, Pittman discloses the fuel cell maintenance device of claim 11, wherein the relay comprises a solid-state relay (Column 11, lines 31-32).

Regarding claim 13, Pittman, Uribe, and lino disclose the fuel cell maintenance device of claim 11, wherein the relay is further capable of shorting a second cell of the fuel cell stack (Pittman figure 1, element Q3) (When using a stack of cells such as lino does, it is necessary to duplicate the parts or Pittman's original design)

Regarding claim 14, Pittman, Uribe, and lino disclose the fuel cell maintenance device of claim 11, further comprising: a second relay capable of shorting at least a second cell of a fuel cell stack (see claim 13); a second dielectrically isolated driver capable of driving second relay responsive to the pulse generator output (lino figure 1, element 20b); and a control circuit capable of controlling to which of the first and second relays the pulse generator output is transmitted (lino Figure 1, element 1).

Regarding claim 15, Pittman, Uribe, and lino disclose the fuel cell maintenance device of claim 14, wherein at least one of the first relay and the second relay is further capable of shorting one of a third cell and a fourth cell of the fuel cell stack (Pittman Column 3,lines 23-25) (The relay of Pittman with his multi cell battery can be shorting a third and fourth cell).

Regarding claim 18, Pittman, Uribe, and lino disclose the fuel cell maintenance device of claim 11, wherein the pulse generator (Pittman Figure 1, element 17) is capable of pulsing a cathode of a second cell through the relay (Pittman Column 11, lines 29-31) when the dielectrically isolated driver closes the relay to short the cell (lino figure 1,element 20a).

Regarding claim 19, Pittman discloses a cell maintenance device for maintenance device comprising: at least one relay electrically connected in parallel across the cell (figure 1,element Q3); and a pulse generator (Figure 1, element 17) to pulse a cathode of the cell through the relay. Pittman does not expressly disclose wherein the cell is a fuel cell and part of a fuel cell stack, nor does he disclose the use of a dielectrically isolated driver to control the system, lino teaches of using a dielectrically isolated driver in his cell stack system(Figure 1, element 20b and 101-120). The Dielectric isolated drivers are used electrically separate the battery stack from the controller, while allowing the control to maintain control and monitor the system. It therefore would have been obvious to one having ordinary skill in the art at the time of this invention to combine the teaching of lino and use a dielectrically isolated device to control Pittman's system. Uribe teaches a method for improving fuel cell performance by pulsing the cathode of a fuel cell (Column 2, lines 39-46). It would have been obvious to a person having ordinary skill in the art at the time of this invention to use the system of Pittman with fuel cells, as Uribe teaches it would improve the performance of the fuel cells. Pittman, Uribe, and lino discloses the fuel cell maintenance device wherein at least one of the pulse generator (Pittman Figure 1, element 17),the relay (Pittman

Figure 1, element Q3), the dielectrically isolated driver (lino Figure 1, element Q3). Neither Pittman, Uribe, nor lino expressly teaches where the above elements receive power returned from the fuel cell stack, lino does teach that the battery stack is used to supply some power to the battery monitoring (figure 1). It would have been obvious to a person having ordinary skill in the art at the time of this invention to use the power that is being released by the battery during the pulsing for the system, and not let it just be wasted. Pittman further discloses the fuel cell maintenance wherein the power returned includes a voltage regulator (Figure 1, element 24).

Regarding claim 20, Pittman further discloses the fuel cell maintenance device of claim 19, wherein the relay comprises a solid-state relay (Column 11, lines 31-32).

Regarding claim 21, Pittman discloses the fuel cell maintenance device of claim 19, wherein the relay is further electrically connected in parallel across a second cell of the fuel cell stack (Pittman Figure 1, element Q3).

Regarding claim 22, Pittman, Uribe and lino disclose the fuel cell maintenance device of claim 19, further comprising: a second relay electrically connected in parallel across a second cell of a fuel cell stack (Pittman's system in combination with the cell stack of lino, seen in claim 19); a second dielectrically isolated driver capable (lino Figure 1, element 20b) of driving second relay responsive to the pulse generator output (Pittman Figure 1, element 17); and a control circuit capable of controlling to which of the first and second relays the pulse generator output is transmitted (lino Figure 1, element 1).

Regarding claim 23, Pittman, Uribe, and Iino disclose the fuel cell maintenance device of claim 22, wherein at least one of the first relay and the second relay is further capable of shorting one of a third cell and a fourth cell of the fuel cell stack (Pittman Column 3, lines 23-25) (The relay of Pittman with his multi cell battery can be shorting a third and fourth cell).

Regarding claim 26, Pittman, Uribe, and Iino disclose the fuel cell maintenance device of claim 19,wherein: the relay is electrically connected in parallel across a second cell (Pittman figure 1, element Q3, in addition to the cell stack of Iino); and the pulse generator (Pittman figure 1, element 17) is electrically connected to the dielectrically isolated driver (Iino Figure 1, element 20b) to pulse a cathode of the second cell through the relay when the dielectrically isolated driver closes the relay (Pittman column 11, lines 29-31).

Regarding claim 27, Pittman, Uribe, and Iino discloses an apparatus, comprising: a fuel stack (Uribe Column 2, lines 39-46), including a plurality of cells (Iino Figure 1, elements 101-120); a switch bank, including a plurality of switches, each switch electrically connected in parallel across at least one of the cells (Pittman discloses using a switch (figure 1 element Q3) to pulse a cell, and therefore in a multi cell system, such as Iino, multiple switches must be used) ; a pulse generator capable of pulsing the cathodes of the cells when the respective switch is closed (Pittman Column 11, lines 29-31); and a control circuit (Pittman Figure 1, element 17) electrically connected in series between the pulse generator and the switch bank to sequentially open and close the switches. It would have been obvious to one having ordinary skill in the art at the time of

this invention to combine the teachings of Pittmans battery reconditioning with the cell stack of Iino so that the cells in the stack will maintain an excellent state of health. Pittman, Uribe, and Iino disclose each switch comprises: a relay capable of shorting at least one cell of a fuel cell stack (Pittman Figure 1, element Q3); and a dielectrically isolated driver capable of driving the relay (Iino Figure 1, element 20a).

Regarding claim 29, Pittman discloses the apparatus of claim 28, wherein the relay comprises a solid-state relay (Column 11, lines 31-32).

Regarding claim 30, Pittman, Uribe, and Iino disclose the apparatus of claim 28, wherein the relay is further capable of shorting a second cell of the fuel cell stack.

Regarding claim 31, Pittman, Uribe, and Iino disclose the apparatus of claim 27, wherein each switch is capable of shorting a plurality of cells (Pittmans switch is connected to a battery, the battery can be made up of multiple cells (column 1, lines 23-25)).

Regarding claim 32, Pittman, Uribe, and Iino disclose the apparatus of claim 27, wherein at least one of the switch bank and the pulse generator is capable of receiving power returned from the fuel cell stack (Column 11, lines 29-31).

Regarding claim 33, Pittman, Uribe, and Iino disclose the apparatus of claim 32, further comprising a voltage regulator (Pittman figure 1, element 24) through which at least one of the switch bank and the pulse generator is capable of receiving power returned from the fuel cell stack (see above rejection for claim 25).

Regarding claim 34, Pittman, Uribe, and Iino disclose the apparatus of claim 27, wherein the cells are proton exchange membrane fuel cells (Uribe Column 1, lines 52-63).

Regarding claim 35, Pittman, Uribe, and Iino disclose the apparatus of claim 27, wherein control circuit includes: a counter driven by a clock; and a multiplexer multiplexing the output of the pulse generator to the switches responsive to the count of the counter (Iino Column 5, lines 19-25).

Regarding claim 36, Pittman discloses a method for transparently maintaining cells, the method comprising: sequentially pulsing the cathodes of a plurality of cells (column 11, lines 29-31). Pittman does not expressly disclose using fuel cells, nor does he expressly disclose maintaining consistent power to the load. Uribe teaches a method for improving fuel cell performance by pulsing the cathode of a fuel cell (Column 2, lines 39-46). It would have been obvious to a person having ordinary skill in the art at the time of this invention to use the system of Pittman with fuel cells, as Uribe teaches it would improve the performance of the fuel cells, Iino teaches of maintaining a consistent number of the cells providing power to a load, by sequentially monitoring the cells, Iino's sequential monitoring method would be used in Pittmans reconditioning system would allow only one battery to be pulsed at a time, and therefore would make sure a consistent number of cells would be available. Pittman, Uribe, and Iino disclose the pulsing the cathodes includes: generating a pulse train (Pittman Figure 3a); and sequentially supplying the pulse train to the cells (Iino teaches of sequentially moving from cell to cell (Column 11, lines 26-36)). Pittman, Uribe, and Iino disclose sequentially

supplying the pulse train to the cells includes: supplying the pulse train to a first cell of the fuel cell stack to pulse a cathode thereof (Pittman Figure 3a); and switching the supply of the pulse train from the first cell to a second cell of the fuel stack to pulse a cathode thereof (lino teaches of sequentially moving from cell to cell (Column 11, lines 26-36)). It therefore would have been obvious to a person having ordinary skill in the art at the time of this invention to use lino's method of moving from cell to cell, with Pittmans cell pulsing, in order to efficiently pulse all the cells.

Regarding claim 39, Pittman, Uribe, and lino disclose sequentially pulsing the cathodes of the cells includes: supplying the pulse train to a first cell of the fuel cell stack to pulse a cathode thereof (Pittman Figure 3a); and switching the supply of the pulse train from the first cell to a second cell of the fuel stack to pulse a cathode thereof (lino teaches of sequentially moving from cell to cell (Column 11, lines 26-36)). It therefore would have been obvious to a person having ordinary skill in the art at the time of this invention to use lino's method of moving from cell to cell, with Pittmans cell pulsing, in order to efficiently pulse all the cells.

Regarding claim 43, Pittman discloses a cell maintenance device, comprising: means for imposing a low impedance across at least one cell of a cell (Column 3, lines 53-63); and a pulse generator capable of pulsing a cathode of the at least one cell of a fuel cell stack through the low impedance imposing means (Column 11, lines 29-31). Pittman does not expressly disclose this method being used on a fuel cell. Uribe teaches a method for improving fuel cell performance by pulsing the cathode of a fuel cell (column 2, lines 39-46). It would have been obvious to a person having ordinary skill

in the art at the time of this invention to use the system of Pittman with fuel cells, as Uribe teaches it would improve the performance of the fuel cells. Pittman in view of Uribe disclose the fuel cell maintenance device wherein the low impedance imposing means includes a switch that imposes the low impedance when closed and receiving a pulse from the pulse generator (Figure 1, element Q3). Pittman and Uribe disclose the fuel cell maintenance wherein the switch comprises: a relay capable of shorting the cell of a fuel cell stack (Pittman Figure 1, element Q3); Neither Pittman nor Uribe teach of using a dielectrically isolated driver, lino teaches of using dielectrically isolated drivers to control the operation of a battery stack (Figure 1, element 20a). It would have been obvious to a person having ordinary skill in the art at the time of this invention to combine the teachings of lino, and use dielectrically isolated driver in order to isolate part of the circuitry.

Regarding claim 46, Pittman further discloses the fuel cell maintenance device wherein the relay comprises a solid-state relay (Column 11, lines 31-32).

Regarding claim 47, the fuel cell maintenance device of claim 45, wherein the relay is further capable of shorting a second cell of the fuel cell stack (Pittman figure 1, element Q3) (When using a stack of cells such as lino does, it is necessary to duplicate the parts or Pittman's original design).

Regarding caim 48, Pittman in view of Uribe disclose the fuel cell maintenance device of claim 43. Neither Pittman nor Uribe expressly teach of the system being used in a multi cell system, lino teaches of a detecting and controlling system for a multi cell stack. It would have been obvious to a person having ordinary skill in the art at the time

of this invention to duplicate the parts of Pittman and use the system for maintenance with lino's stack of cell. Which then yields a s second means for imposing a low impedance across at least a second cell of a fuel cell stack (Pittman Column 11, lines 29-31); and a control circuit capable of controlling to which of the first and second low impedance imposing means the pulse generator output is transmitted. (lino Figure 1, element 1).

Regarding claim 49, Pittman, Uribe, and lino disclose the fuel cell maintenance device of claim 48, wherein the second low impedance imposing means includes a second switch (Pittman Figure 1, element Q3, which would be duplicated for the multi cell stack as per the combination of the lino reference) that imposes the low impedance when closed and receiving a pulse from the pulse generator (Pittman Column 11, lines 29-31).

Regarding claim 50, Pittman, Uribe, and lino disclose the fuel cell maintenance device of claim 49, wherein the second switch includes: a second relay capable of shorting at least a second cell of a fuel cell stack (see claim 13); a second dielectrically isolated driver capable of driving second relay responsive to the pulse generator output (lino figure 1, element 20b).

Regarding claim 51, Pittman, Uribe, and lino disclose the fuel cell maintenance device of claim 50, wherein at least one of the first relay and the second relay is further capable of shorting one of a third cell and a fourth cell of the fuel cell stack (Pittman Column 3, lines 23-25) (The relay of Pittman with his multi cell battery can be shorting a third and fourth cell).

Regarding claim 52, Pittman, Uribe, and Iino teach the fuel cell maintenance device of claim 43, wherein at least one of the low impedance imposing means (Pittman Figure 1, element Q3) and the pulse generator (Pittman Figure 1, element 17). Neither Pittman, Uribe, nor Iino expressly teaches where the above elements receive power returned from the fuel cell stack, Iino does teach that the battery stack is used to supply some power to the battery monitoring (figure 1). It would have been obvious to a person having ordinary skill in the art at the time of this invention to use the power that is being released by the battery during the pulsing for the system, and not let it just be wasted.

Regarding claim 53, Pittman further discloses the fuel cell maintenance device of claim 52, further comprising a voltage regulator (Figure 1, element 24) through which at least one of the switch and the pulse generator is capable of receiving power returned from the fuel cell stack (see rejection for claim 52).

Regarding claim 54, Pittman, Uribe, and Iino disclose the fuel cell maintenance device of claim 43, wherein the pulse generator (Pittman figure 1, element 17) is capable of pulsing a cathode of a second cell through the low impedance imposing means (Pittman Column 11, lines 29-31) (With the combination of the multi cell system as taught by Iino).

Response to Arguments

Applicant's arguments filed 4/26/07 have been fully considered but they are not persuasive. The addition of the "pulse generator generates digital pulses" does not

affect the crux of the claims because one of skill would know to use the correct type of pulses, this case it is being digital pulses, if one were to 'filter' it through a controller.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to the Examiner at the below-listed number on every Tuesday, Thursday and Saturday.

By: /Edward H Tso/ ,
EDWARD H TSO
Primary Examiner
(571) 272-2087